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Alexandria, VA 22313-1450FROM: George H. Gates  
OUR REF.: 9011  
TELEPHONE: (310) 642-4146Total pages, including cover letter: **31**PTO FAX NUMBER: **703 872-9306**

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Title of Document Transmitted:	TRANSMITTAL DOCUMENTS; BRIEF OF APPELLANT AND AUTHORIZATION TO CHARGE THE DEPOSIT ACCOUNT IN THE AMOUNT OF \$500.00
Applicant:	George R. Hood
Serial No.:	09/608,682
Filed:	June 29, 2000
Group Art Unit:	3627
Title:	RISK PROVISION IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM
Our Ref. No.:	9011

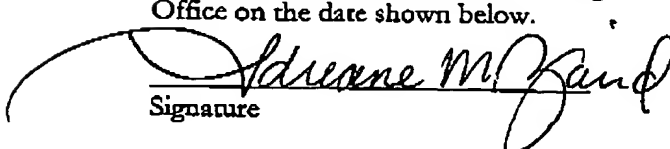
Please charge all fees to Deposit Account No. 50-1673 of NCR Corporation, the assignee of the present application.

By: 

Name: George H. Gates

Reg. No.: 33,500

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

  
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Due Date: May 16, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	George R. Hood	Examiner:	Andrew J. Rudy
Serial No.:	09/608,682	Group Art Unit:	3627
Filed:	June 29, 2000	Docket:	9011
Title:	RISK PROVISION IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM		

## CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being filed via facsimile transmission to the U.S. Patent and Trademark Office on May 16, 2005.

By: George H. Gates  
Name: George H. Gates

## MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We are transmitting herewith the attached:

- ☒ Transmittal sheet, in duplicate, containing a Certificate of Mailing or Transmission under 37 CFR 1.8.
- ☒ Brief of Appellant(s).
- ☒ Charge the Fee for the Brief of Appellant(s) in the amount of \$500.00 to the Deposit Account.

Please consider this a **PETITION FOR EXTENSION OF TIME** for a sufficient number of months to enter these papers, if appropriate.

Please charge all fees to Deposit Account No. 14-0225 of NCR Corporation (the assignee of the present application). A duplicate of this paper is enclosed.

**GATES & COOPER LLP**  
Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, CA 90045  
(310) 641-8797

By: George H. Gates  
Name: George H. Gates  
Reg. No.: 33,500  
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**MAY 16 2005**

Due Date: May 16, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
	)	
Inventor: George R. Hood	)	Examiner: Andrew J. Rudy
	)	
Serial #: 09/608,682	)	Group Art Unit: 3627
	)	
Filed: June 29, 2000	)	Appeal No.: _____
	)	
Title: RISK PROVISION IMPLEMENTATION	)	
FOR FINANCIAL PROCESSING IN A	)	
RELATIONAL DATABASE	)	
<u>MANAGEMENT SYSTEM</u>	)	

**BRIEF OF APPELLANT**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellant's attorney hereby submits the Brief of Appellants on appeal from the final rejection in the above-identified application as set forth in the Office Action dated November 18, 2004.

Please charge the amount of \$500.00 to cover the required fee for filing this Brief as set forth under 37 CFR §41.20(b)(2) to Deposit Account No. 50-1673 of NCR Corporation, the assignee of the present application. Also, please charge any additional fees or credit any overpayments to Deposit Account No. 50-1673.

**I. REAL PARTY IN INTEREST**

The real party in interest is NCR Corporation, the assignee of the present application.

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## II. RELATED APPEALS AND INTERFERENCES

There are related appeals in the following co-pending and commonly-assigned patent applications:

Application Serial No. 09/608,355, filed on June 29, 2000, by George R. Hood et al., entitled ADVANCED AND BREAKTHROUGH NET INTEREST REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9006 (30145.401US01);

Application Serial No. 09/943,059, filed on August 30, 2001, by Paul H. Phibbs, Jr., entitled ALLOCATED BALANCES IN A NET INTEREST REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9512 (30145.405USU1);

Application Serial No. 09/608,681, filed on June 29, 2000, by George R. Hood, entitled OTHER REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9015 (30145.391US01); and

Application Serial No. 09/610,646, filed on June 29, 2000, by George R. Hood et al., entitled BASIC AND INTERMEDIATE NET INTEREST REVENUE IMPLEMENTATIONS FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 8980 (30145.397US01).

## III. STATUS OF CLAIMS

Claims 1-81 are pending in the application.

Claims 1-81 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of "College Accounting, Seventh Edition," to Price.

Claims 1-81 are being appealed.

## IV. STATUS OF AMENDMENTS

No amendments have been made subsequent to the final Office Action.

## V. SUMMARY OF THE INVENTION

Appellant's independent claims 1, 28 and 55 are generally directed to an invention that performs financial processing in a computer.

Independent claim 1 recites a method of performing financial processing in a computer. The method includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The method also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

Independent claim 28 recites a system for financial processing. The system includes a computer and logic, performed by the computer. The logic includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The logic also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)}\end{aligned}$$

- Direct Expense (DE)
- Indirect Expense (IE)
- Risk Provision (RP)

wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

Independent claim 55 recites an article of manufacture embodying logic for performing financial processing in a computer. The article includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The article also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

With regard to the claims, Appellant's attorney requests that the Board refer to the specification generally. Specific portions of the specification that directly relate to the claims on appeal include:

- (a) at page 4, line 11 through page 6, line 14;
- (b) at page 8, line 16 through page 14, line 8, and in FIG. 2 as reference numbers 200-214;
- (c) at page 15, line 1 through page 21, line 20; and
- (d) at page 23, lines 4-19, and in FIG. 3 as reference number 314.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-81 are obvious under 35 U.S.C. §103(a) in view of "College Accounting, Seventh Edition," to Price.

VII. ARGUMENTS

A. The Office Action Rejections

In paragraphs (1)-(2) of the Office Action, claims 1-81 were rejected under 35 U.S.C. §103(a) as being unpatentable over Price et al., "College Accounting, Seventh Edition," (Price). Appellant's attorney respectfully traverses these rejections.

B. Appellant's Independent Claims

As noted above, Appellant's independent claims 1, 28 and 55 are generally directed to an invention that performs financial processing in a computer. Claim 1 is representative and comprises the steps of:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

Profit = Net Interest Revenue (NIR)  
+ Other Revenue (OR)  
- Direct Expense (DE)  
- Indirect Expense (IE)  
- Risk Provision (RP)

(c) wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

C. The Price Reference

Price is a college accounting textbook that describes accounting concepts and principles. The portions cited describe analyzing business transactions including the accounting cycle, accounting for assets and liabilities including accounts receivable and uncollectible accounts, and responsibility and cost accounting including departmentalized profit and cost centers.

D. Arguments Directed To The First Grounds for Rejection: Whether Claims 1-83 Are Obvious Under 35 U.S.C. §103(a) In View of Price.

1. Claims 1, 28 and 55

Appellant's attorney respectfully submits that Appellant's claimed invention is patentable over the Price reference. Specifically, Appellant's attorney asserts that the reference does not teach or suggest the specific combination of elements recited in Appellant's claims.

However, the Office Action asserts the following:

Claims 1-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. "College Accounting, Seventh Edition" (hereafter "Price")

Price discloses, e.g. pgs 28-41, 529, 531, 966-982 (Fig. 27-5), a method measuring profit based on the factors of net interest revenue, other revenues (Fig. 27-5, line 4, "Operating Revenues"), direct expenses (Fig. 27-5, line 22, "Direct Expenses"), indirect expenses (Fig. 27-5, line 30, "Indirect Expenses"), and risk (Fig. 27-5, line 6, "Less Sales Returns and Allowances"), all set up to take advantage of flexible business rules.

Official Notice is taken that performing financial processing using computer software is common knowledge in the art.

To have provided a method of performing financial processing for an account using software for a computer measuring profit based on the factors of net interest revenue, other revenues, direct expenses, indirect expenses and risk, all set up to take advantage of flexible business rules the business rules to calculate known variations of one of the factors, e.g. other revenue, would have been obvious to one of ordinary skill in the art. Doing such would incorporate common knowledge data along with common knowledge software.

Applicant's August 13, 2004 and January 29, 2004 REMARKS have been reviewed, but are not convincing. In short, Applicant's profitability calculations are common knowledge variance for defining total income less total expenses. The account, event and organization attributes, e.g., future losses, direct and indirect expenses, claimed have been common knowledge criteria used within the



business community for a period of time far exceeding Applicant's filing date. To have incorporated such common knowledge in the profitability calculations for Price, as modified by Official Notice, would have been obvious to one of ordinary skill in the art.

Appellant's attorney disagrees with this analysis.

Price, in combination with Official Notice, does not teach or suggest the claimed elements of accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status, and performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{array}{rcl} \text{Profit} & = & \text{Net Interest Revenue (NIR)} \\ & + & \text{Other Revenue (OR)} \\ & - & \text{Direct Expense (DE)} \\ & - & \text{Indirect Expense (IE)} \\ & - & \text{Risk Provision (RP)} \end{array}$$

More specifically, Price does not teach or suggest the claimed profitability calculations wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors. Instead, the "Less Sales Returns and Allowances" cited in FIG. 27-5 of Price merely comprises current returns and allowances, not expected future losses or risk factors. Consequently, the rejections fail to persuade.

Appellant's claimed invention provides operational advantages over the system disclosed in Price. Price reflects an outdated approach to income statements. Appellant's invention, on the other hand, describes a different, more sophisticated model for implementing profitability calculations in a computer system, as well as a different, more sophisticated set of relationships between the elements of the model. Price fails to teach or suggest the specific model, all of the elements of the model, or the relationships between the various elements.

Thus, Appellant's attorney submits that independent claims 1, 28 and 55 are allowable over Price in combination with Official Notice. Further, dependent claims 2-27, 29-54 and 55-81 are submitted to be allowable over Price in combination with Official Notice in the same manner, because they are dependent on independent claims 1, 28 and 55, respectively, and because they contain all the limitations of the independent claims. In addition, dependent claims 2-27, 29-54 and 55-81 recite additional novel elements not shown by Price in combination with Official Notice.

2. Claims 2, 29 and 56

Claims 2, 29 and 56 recite that the risk factors are selected from a group comprising loss rates, reserve percentages, exposure factors, recovery rates, default probabilities, and collection costs. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

3. Claims 3, 30 and 57

Claims 3, 29 and 56 recite that the rules include apportionment of the Risk Provision among the accounts. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

4. Claims 4, 31 and 58

Claims 4, 29 and 56 recite that the Risk Provision predicts the expected future losses at the account level. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

5. Claims 5, 32 and 59

Claims 5, 29 and 56 recite that the Risk Provision apportions the expected future loss among the accounts. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

6. Claims 6, 33 and 60

Claims 6, 29 and 56 recite that the Risk Provision adjusts the Profit for the expected future losses. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

7. Claims 7, 34 and 61

Claims 7, 29 and 56 recite that an actuarial reserve represents the expected future losses. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

8. Claims 8, 35 and 62

Claims 8, 29 and 56 recite that the organization commits reserves to cover the expected future loss. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

9. Claims 9, 36 and 63

Claims 9, 29 and 56 recite provisioning the reserves as transactions occur. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

10. Claims 10, 37 and 64

Claims 10, 29 and 56 recite withdrawing from the reserves as defaults occur. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

11. Claims 11, 38 and 65

Claims 11, 29 and 56 recite that the reserves include Ending Loss Reserves and Beginning Loss Reserves, and the Ending Loss Reserves comprises:

Ending Loss Reserves = Beginning Loss Reserves

- Losses
- + Recoveries
- + Risk Provisions

The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

12. Claims 12, 39 and 66

Claims 12, 29 and 56 recite grouping the accounts into risk provision groups (RPG), wherein each of the accounts is assigned to only one RPG. The Office Action rejects these

claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

13. Claims 13, 40 and 67

Claims 13, 29 and 56 recite that each of the RPGs has a Risk Provision amount associated therewith. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

14. Claims 14, 41 and 68

Claims 14, 29 and 56 recite that the Risk Provision amount associated with each of the RPGs is assigned by the organization. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

15. Claims 15, 42 and 69

Claims 15, 29 and 56 recite that the Risk Provision amount associated with each of the RPGs is calculated. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

16. Claims 16, 43 and 70

Claims 16, 29 and 56 recite that the Risk Provision amount associated with each of the RPGs comprises:

Risk Provision= Reserve amount for  $RPG_i$  at end of a current period

- Reserve amount for  $RPG_i$  at end of a previous period

+ Losses during the current period

- Recoveries during the current period

The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 17. Claims 17, 44 and 71

Claims 17, 29 and 56 recite that the apportionment of the Risk Provision amounts to each account in one of the RPGs is based on a balance for the account. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 18. Claims 18, 45 and 72

Claims 18, 29 and 56 recite calculating the Risk Provision of an account according to:

$$RP(a_i) + RP \text{ amount for } RPG(a_i) * \frac{\text{Balance of } a_i}{\sum_{k \in RPG(a_i)} \text{Balance } a_k}$$

wherein  $a_i$  comprises an account,  $RP(a_i)$  comprises the Risk Provision for the account  $a_i$ , and  $RPG(a_i)$  denotes to which RPG the account  $a_i$  is assigned. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

19. Claims 19, 46 and 73

Claims 19, 29 and 56 recite that a sum of  $RP(a_i)$  for all accounts  $a_i$  in one of the RPGs is equal to the RP for the RPG. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

20. Claims 20, 47 and 74

Claims 20, 29 and 56 recite that the Risk Provision comprises an account-level risk factor that is used to weight the accounts' balances. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

21. Claims 21, 48 and 75

Claims 21, 29 and 56 recite that the Risk Provision amount is allocated to each RPG and multiplied by a Credit Risk Factor (CRF). The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

22. Claims 22, 49 and 76

Claims 22, 29 and 56 recite that the Credit Risk Factor (CRF) identifies costs associated with expected future losses that arise in lending activities. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

23. Claims 23, 50 and 77

Claims 23, 29 and 56 recite calculating  $RP(a_i)$  according to:

$$RP \text{ for } a_i = RP \text{ amount for } RPG(a_i) * \frac{Balance(a_i) * CRF(a_i)}{\sum_k [Balance(a_k) * CRF(a_k)]}$$

The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

24. Claims 24, 51 and 78

Claims 24, 29 and 56 recite that the CRF adjusts the Risk Provision for risk factors that are subordinate to the RPGs. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

25. Claims 25, 52 and 79

Claims 25, 29 and 56 recite that the Risk Provision comprises an expected future loss calculated for each account using account, product, and customer characteristics. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

26. Claims 26, 53 and 80

Claims 26, 29 and 56 recite that an exposure amount allows the direct calculation of the Risk Provision. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching



these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 27. Claims 27, 54 and 81

Claims 27, 29 and 56 recite calculating  $RP(a_i)$  according to:

$$RP(a_i) = Exposure(a_i) * CDP(a_i) * \left( 1 - \min \left( 1, \frac{RCV(a_i)}{Balance(a_i) + Collection\ Cost(a_i)} \right) \right)$$

wherein  $Exposure(a_i)$  is the exposure amount for account  $a_i$  and the Customer Default Probability  $CDP(a_i)$  is a probability function of credit risk default frequency for the account  $a_i$ . The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellant's attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### VIII. CONCLUSION

In light of the above arguments, Appellant's attorney respectfully submits that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellant's claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103.

As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

GATES & COOPER LLP  
Attorneys for Appellant

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Date: May 16, 2005

By: 

Name: George H. Gates

Reg. No.: 33,500

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## APPENDIX

1. A method of performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

2. The method of claim 1, wherein the risk factors are selected from a group comprising loss rates, reserve percentages, exposure factors, recovery rates, default probabilities, and collection costs.

3. The method of claim 1, wherein the rules include apportionment of the Risk Provision among the accounts.

4. The method of claim 1, wherein the Risk Provision predicts the expected future losses at the account level.

5. The method of claim 4, wherein the Risk Provision apportions the expected future loss among the accounts.

6. The method of claim 4, wherein the Risk Provision adjusts the Profit for the expected future losses.

7. The method of claim 4, wherein an actuarial reserve represents the expected future losses.

8. The method of claim 4, the organization commits reserves to cover the expected future loss.

9. The method of claim 8, further comprising provisioning the reserves as transactions occur.

10. The method of claim 8, further comprising withdrawing from the reserves as defaults occur.

11. The method of claim 1, wherein the reserves include Ending Loss Reserves and Beginning Loss Reserves, and the Ending Loss Reserves comprises:

Ending Loss Reserves = Beginning Loss Reserves

– Losses

+ Recoveries

+ Risk Provisions

12. The method of claim 1, further comprising grouping the accounts into risk provision groups (RPG), wherein each of the accounts is assigned to only one RPG.

13. The method of claim 12, wherein each of the RPGs has a Risk Provision amount associated therewith.

14. The method of claim 12, wherein the Risk Provision amount associated with each of the RPGs is assigned by the organization.

15. The method of claim 12, wherein the Risk Provision amount associated with each of the RPGs is calculated.

16. The method of claim 15, wherein the Risk Provision amount associated with each of the RPGs comprises:

Risk Provision= Reserve amount for  $RPG_i$  at end of a current period  
 - Reserve amount for  $RPG_i$  at end of a previous period  
 + Losses during the current period  
 - Recoveries during the current period

17. The method of claim 12, wherein the apportionment of the Risk Provision amounts to each account in one of the RPGs is based on a balance for the account.

18. The method of claim 12, further comprising calculating the Risk Provision of an account according to:

$$RP(a_i) + RP \text{ amount for } RPG(a_i) * \frac{\text{Balance of } a_i}{\sum_k \text{Balance } a_k}$$

wherein  $a_i$  comprises an account,  $RP(a_i)$  comprises the Risk Provision for the account  $a_i$ , and  $RPG(a_i)$  denotes to which RPG the account  $a_i$  is assigned.

19. The method of claim 18, wherein a sum of  $RP(a_i)$  for all accounts  $a_i$  in one of the RPGs is equal to the RP for the RPG.

20. The method of claim 18, wherein the Risk Provision comprises an account-level risk factor that is used to weight the accounts' balances.

21. The method of claim 18, wherein the Risk Provision amount is allocated to each RPG and multiplied by a Credit Risk Factor (CRF).

22. The method of claim 21, wherein the Credit Risk Factor (CRF) identifies costs associated with expected future losses that arise in lending activities.

23. The method of claim 21, further comprising calculating  $RP(a_i)$  according to:

$$RP \text{ for } a_i = RP \text{ amount for } RPG(a_i) * \frac{Balance(a_i) * CRF(a_i)}{\sum_k [Balance(a_k) * CRF(a_k)]}$$

24. The method of claim 21, wherein the CRF adjusts the Risk Provision for risk factors that are subordinate to the RPGs.

25. The method of claim 1, wherein the Risk Provision comprises an expected future loss calculated for each account using account, product, and customer characteristics.

26. The method of claim 1, wherein an exposure amount allows the direct calculation of the Risk Provision.

27. The method of claim 26, further comprising calculating  $RP(a_i)$  according to:

$$RP(a_i) = Exposure(a_i) * CDP(a_i) * \left( 1 - \min \left( 1, \frac{RCV(a_i)}{Balance(a_i) + Collection Cost(a_i)} \right) \right)$$

wherein  $Exposure(a_i)$  is the exposure amount for account  $a_i$  and the Customer Default Probability  $CDP(a_i)$  is a probability function of credit risk default frequency for the account  $a_i$ .

28. A system for financial processing, comprising:  
a computer;

logic, performed by the computer, for:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

29. The system of claim 28, wherein the risk factors are selected from a group comprising loss rates, reserve percentages, exposure factors, recovery rates, default probabilities, and collection costs.

30. The system of claim 28, wherein the rules include apportionment of the Risk Provision among the accounts.

31. The system of claim 28, wherein the Risk Provision predicts the expected future losses at the account level.

32. The system of claim 31, wherein the Risk Provision apportions the expected future loss among the accounts.

33. The system of claim 31, wherein the Risk Provision adjusts the Profit for the expected future losses.

34. The system of claim 31, wherein an actuarial reserve represents the expected future losses.

35. The system of claim 31, the organization commits reserves to cover the expected future loss.

36. The system of claim 35, further comprising logic for provisioning the reserves as transactions occur.

37. The system of claim 35, further comprising logic for withdrawing from the reserves as defaults occur.

38. The system of claim 28, wherein the reserves include Ending Loss Reserves and Beginning Loss Reserves, and the Ending Loss Reserves comprises:

Ending Loss Reserves = Beginning Loss Reserves

– Losses

+ Recoveries

+ Risk Provisions

39. The system of claim 28, further comprising logic for grouping the accounts into risk provision groups (RPG), wherein each of the accounts is assigned to only one RPG.

40. The system of claim 39, wherein each of the RPGs has a Risk Provision amount associated therewith.

41. The system of claim 39, wherein the Risk Provision amount associated with each of the RPGs is assigned by the organization.

42. The system of claim 39, wherein the Risk Provision amount associated with each of the RPGs is calculated.

43. The system of claim 42, wherein the Risk Provision amount associated with each of the RPGs comprises:

Risk Provision = Reserve amount for RPG<sub>i</sub> at end of a current period



- Reserve amount for  $RPG_i$  at end of a previous period
- + Losses during the current period
- Recoveries during the current period

44. The system of claim 39, wherein the apportionment of the Risk Provision amounts to each account in one of the RPGs is based on a balance for the account.

45. The system of claim 39, further comprising logic for calculating the Risk Provision of an account according to:

$$RP(a_i) + RP \text{ amount for } RPG(a_i) * \frac{\text{Balance of } a_i}{\sum_k \text{Balance } a_k}$$

wherein  $a_i$  comprises an account,  $RP(a_i)$  comprises the Risk Provision for the account  $a_i$ , and  $RPG(a_i)$  denotes to which RPG the account  $a_i$  is assigned.

46. The system of claim 45, wherein a sum of  $RP(a_i)$  for all accounts  $a_i$  in one of the RPGs is equal to the RP for the RPG.

47. The system of claim 45, wherein the Risk Provision comprises an account-level risk factor that is used to weight the accounts' balances.

48. The system of claim 45, wherein the Risk Provision amount is allocated to each RPG and multiplied by a Credit Risk Factor (CRF).

49. The system of claim 48, wherein the Credit Risk Factor (CRF) identifies costs associated with expected future losses that arise in lending activities.

50. The system of claim 48, further comprising logic for calculating  $RP(a_i)$  according to:

$$RP \text{ for } a_i = RP \text{ amount for } RPG(a_i) * \frac{\text{Balance}(a_i) * CRF(a_i)}{\sum_k [\text{Balance}(a_k) * CRF(a_k)]}$$

51. The system of claim 48, wherein the CRF adjusts the Risk Provision for risk factors that are subordinate to the RPGs.

52. The system of claim 28, wherein the Risk Provision comprises an expected future loss calculated for each account using account, product, and customer characteristics.

53. The system of claim 28, wherein an exposure amount allows the direct calculation of the Risk Provision.

54. The system of claim 53, further comprising logic for calculating  $RP(a_i)$  according to:

$$RP(a_i) = Exposure(a_i) * CDP(a_i) * \left( 1 - \min \left( 1, \frac{RCV(a_i)}{Balance(a_i) + Collection Cost(a_i)} \right) \right)$$

wherein  $Exposure(a_i)$  is the exposure amount for account  $a_i$  and the Customer Default Probability  $CDP(a_i)$  is a probability function of credit risk default frequency for the account  $a_i$ .

55. An article of manufacture embodying logic for performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned} \text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)} \end{aligned}$$

(c) wherein the Risk Provision comprises an expected future loss that arises from one or more risk factors.

56. The article of manufacture of claim 55, wherein the risk factors are selected from a group comprising loss rates, reserve percentages, exposure factors, recovery rates, default probabilities, and collection costs.

57. The article of manufacture of claim 55, wherein the rules include apportionment of the Risk Provision among the accounts.

58. The article of manufacture of claim 55, wherein the Risk Provision predicts the expected future losses at the account level.

59. The article of manufacture of claim 58, wherein the Risk Provision apportions the expected future loss among the accounts.

60. The article of manufacture of claim 58, wherein the Risk Provision adjusts the Profit for the expected future losses.

61. The article of manufacture of claim 58, wherein an actuarial reserve represents the expected future losses.

62. The article of manufacture of claim 58, the organization commits reserves to cover the expected future loss.

63. The article of manufacture of claim 62, further comprising provisioning the reserves as transactions occur.

64. The article of manufacture of claim 62, further comprising withdrawing from the reserves as defaults occur.

65. The article of manufacture of claim 55, wherein the reserves include Ending Loss Reserves and Beginning Loss Reserves, and the Ending Loss Reserves comprises:

Ending Loss Reserves = Beginning Loss Reserves

– Losses

+ Recoveries

+ Risk Provisions

66. The article of manufacture of claim 55, further comprising grouping the accounts into risk provision groups (RPG), wherein each of the accounts is assigned to only one RPG.

67. The article of manufacture of claim 66, wherein each of the RPGs has a Risk Provision amount associated therewith.

68. The article of manufacture of claim 66, wherein the Risk Provision amount associated with each of the RPGs is assigned by the organization.

69. The article of manufacture of claim 66, wherein the Risk Provision amount associated with each of the RPGs is calculated.

70. The article of manufacture of claim 69, wherein the Risk Provision amount associated with each of the RPGs comprises:

Risk Provision = Reserve amount for RPG<sub>i</sub> at end of a current period

– Reserve amount for RPG<sub>i</sub> at end of a previous period

+ Losses during the current period

– Recoveries during the current period

71. The article of manufacture of claim 66, wherein the apportionment of the Risk Provision amounts to each account in one of the RPGs is based on a balance for the account.

72. The article of manufacture of claim 66, further comprising calculating the Risk Provision of an account according to:

$$RP(a_i) + RP \text{ amount for } RPG(a_i) * \frac{\text{Balance of } a_i}{\sum_k \text{Balance } a_k}$$

wherein  $a_i$  comprises an account,  $RP(a_i)$  comprises the Risk Provision for the account  $a_i$ , and  $RPG(a_i)$  denotes to which RPG the account  $a_i$  is assigned.

73. The article of manufacture of claim 72, wherein a sum of  $RP(a_i)$  for all accounts  $a_i$  in one of the RPGs is equal to the RP for the RPG.

74. The article of manufacture of claim 72, wherein the Risk Provision comprises an account-level risk factor that is used to weight the accounts' balances.

75. The article of manufacture of claim 72, wherein the Risk Provision amount is allocated to each RPG and multiplied by a Credit Risk Factor (CRF).

76. The article of manufacture of claim 75, wherein the Credit Risk Factor (CRF) identifies costs associated with expected future losses that arise in lending activities.

77. The article of manufacture of claim 75, further comprising calculating  $RP(a_i)$  according to:

$$RP \text{ for } a_i = RP \text{ amount for } RPG(a_i) * \frac{\text{Balance}(a_i) * CRF(a_i)}{\sum_k [\text{Balance}(a_k) * CRF(a_k)]}$$

78. The article of manufacture of claim 75, wherein the CRF adjusts the Risk Provision for risk factors that are subordinate to the RPGs.

79. The article of manufacture of claim 55, wherein the Risk Provision comprises an expected future loss calculated for each account using account, product, and customer characteristics.

80. The article of manufacture of claim 55, wherein an exposure amount allows the direct calculation of the Risk Provision.

81. The article of manufacture of claim 80, further comprising calculating  $RP(a_i)$  according to:

$$RP(a_i) = Exposure(a_i) * CDP(a_i) * \left( 1 - \min \left( 1, \frac{RCV(a_i)}{Balance(a_i) + Collection\ Cost(a_i)} \right) \right)$$

wherein  $Exposure(a_i)$  is the exposure amount for account  $a_i$  and the Customer Default Probability  $CDP(a_i)$  is a probability function of credit risk default frequency for the account  $a_i$ .